

D6104-005

Work Order ID 141333

141333

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Wednesday, February 03, 2016 4:45:18 PM

Item ID: DSK078

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: D2893-1 Turning Detail

Start Date: 2/3/2016 Start Qty: 5.00

6

Cust Item ID:

Required Date: 2/3/2016 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals: Process Plan: MCS Date: FEB 04 2016 Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
DSK078	Rev A

100

0.00

100

Doosan

Memo

0.05

Doosan Lathe

Turn blank as per Folio FA081
(4TH AXIS PLUG DT8492)

DAS

45

9-89

2016-3-15

110

QC2- Inspect parts off machine FAI/FAIB

0.00

110

QC

Memo

0.00

Quality Control

DAS

45

9-89

2016-3-15

120

QC8- Inspect parts - second check

0.00

120

QC

Memo

0.00

Quality Control

DAS

20

9-89

16-03-17

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
☐ OTHER : _____					

Work Order ID 141333***141333***

Page 2

Wednesday, February 03, 2016 4:45:18 PM

Item ID: DSK078

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: D2893-1 Turning Detail

Start Date: 2/3/2016 Start Qty: 6.00

6

Cust Item ID:

Required Date: 2/3/2016 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
130						14	0		DAS 20 9-89
Packaging	Memo	0.00							16-03-17
Packaging	LOCATION: MAT060								
140	QC21- Final Inspection - Work Order Release	0.00							
140						ML5		MAR 18 2016	
QC	Memo	0.01							
Quality Control									

MAR 17 2016

ML5

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
☐ OTHER : _____					

Picklist Print

Wednesday, February 03, 2016 4:45:18 PM

Page 1

Work Order ID: 141333

141333

Parent Item: DSK078

DSK078

Parent Item Name: D2893-1 Turning Detail

Start Date: 2/3/2016

Required Date: 2/3/2016

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP rev A. 08.03.13 new issue EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6104-005		Manufactured	No				Each	14.0000		6			

D6104-005

Round Billet, 17-4

Location

Loc Qty

Loc Code

MAT043

14

138150

12

140212

2

12
2 / 14

DAS
45 2015-3-10
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong				
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions				
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance				
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect				
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing				
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved				
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing				
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish				
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread				
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence				
Past Expiry Date ☐	☐ Manufacturing Process	OTHER : _____							
Misidentified ☐	☐ Past Due								

DART AEROSPACE LTD		Work Order: 191333
Description: Turning Detail for D2893-1		Part Number: DSK078
Inspection Dwg: DSK078	Rev: A	Page 1 of 13

FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ **First Article**
☐ **Prototype**

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	5
Lathe Section								
A	2.707	2.712		2.709	2.7085	2.708	2.7085	2.708
B	4.946	4.966		4.959	4.959	4.956	2.956	2.956
C	3.064	3.084		3.074	3.074	3.074	3.074	3.074
D	0.718	0.738		0.728	0.728	0.728	0.728	0.728
E	0.090	0.110		0.099	0.099	0.099	0.099	0.099
F	2.934	2.954		2.944	2.944	2.944	2.944	2.944
G	2.166	2.186		2.176	2.176	2.176	2.176	2.176
H	3.890	3.910		3.900	3.900	3.900	3.900	3.900
I	0.914	0.934		0.924	0.924	0.924	0.924	0.924
J	0.022	0.042		0.032	0.032	0.032	0.032	0.032
K	0.109	0.129		0.117	0.117	0.1165	0.117	0.1165
L								
M								
N								
O								
P								

Measured by: DAS 9-89 45	Date: 2016-3-15
Audited by: DAS 9-89 20	Date: 11-03-17
Prototype Approval:	Date:

Rev	Date	Change	Revised by	Approved
A	08.04.22	New Issue	KJ/JLM	

DART AEROSPACE LTD		Work Order:	141333
Description: Turning Detail for D2893-1		Part Number:	DSK078
Inspection Dwg: DSK078		Rev: A	2083 Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	#6	#7	#8	#9	#10
Lathe Section								
A	2.707	2.712		2.708	2.708	2.707	2.707	2.708
B	4.946	4.966		4.956	4.956	4.956	4.955	4.956
C	3.064	3.084		3.074	3.074	3.074	3.074	3.074
D	0.718	0.738		0.728	0.728	0.728	0.728	0.728
E	0.090	0.110		0.099	0.099	0.099	0.099	0.099
F	2.934	2.954		2.944	2.944	2.944	2.944	2.944
G	2.166	2.186		2.176	2.176	2.176	2.176	2.176
H	3.890	3.910		3.900	3.900	3.900	3.900	3.900
I	0.914	0.934		0.924	0.924	0.924	0.924	0.924
J	0.022	0.042		0.032	0.032	0.032	0.032	0.032
K	0.109	0.129		0.117	0.117	0.116	0.116	0.117
L								
M								
N								
O								
P								

DAS
45

Measured by:	9-89	Date:	2016-3-16
Audited by:	20 9-89	Date:	16-03-17
Prototype Approval:		Date:	

Rev	Date	Change	Revised by	Approved
A	08.04.22	New Issue	KJ/JLM	

DART AEROSPACE LTD		Work Order:	141333
Description: Turning Detail for D2893-1		Part Number:	DSK078
Inspection Dwg: DSK078		Rev: A	Page 3 of 3 5 of 2

FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	11	12	13	14	Σ
Lathe Section								
A	2.707	2.712		2.708	2.708	2.708	2.708	
B	4.946	4.966		4.956	4.956	4.956	4.956	
C	3.064	3.084		3.074	3.074	3.074	3.074	
D	0.718	0.738		0.728	0.728	0.728	0.728	
E	0.090	0.110		0.099	0.099	0.099	0.099	
F	2.934	2.954		2.944	2.944	2.944	2.944	
G	2.166	2.186		2.176	2.176	2.176	2.176	
H	3.890	3.910		3.900	3.900	3.900	3.900	
I	0.914	0.934		0.924	0.924	0.924	0.924	
J	0.022	0.042		0.032	0.032	0.032	0.032	
K	0.109	0.129		0.117	0.117	0.117	0.117	
L								
M								
N								
O								
P								

DAS
45

Measured by:	9-89	Date:	2011-3-11
Audited by:	DAS 20 9-89	Date:	16-03-17
Prototype Approval:		Date:	

Rev	Date	Change	Revised by	Approved
A	08.04.22	New Issue	KJ/JLM	

